

Claims

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1. A method of forming a protection film of a safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores, wherein an organic coating is coated on at least one side of it.

2. A method of forming a protection film of a safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores, wherein an organic resin film is laminated on at least one side of it.

3. A method of forming a protection film of a safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores, wherein an organic coating is coated on at least one side of covering portions of said metal foil.

4. A method of forming a protection film of a safety valve element for a battery, wherein an organic coating is coated on a safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores after said safety valve element for a battery is applied on a closing plate for a battery container having a perforated pore which is to be a valve opening of a safety valve so that said perforated pores of said metal substrate of safety valve

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element for a battery and said perforated pore of said closing plate are connected through, and said metal substrate and said closing plate are adhered together using adhering means so that both adhere around said perforated pore of said closing plate.

5. A method of forming a protection film of a safety valve element for a battery according to claim 4, wherein said adhering means is laser beam welding.

6. A safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores, wherein a protection film is covered on at least one side of said safety valve element for a battery.

7. A safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores, wherein a protection film is covered on at least one side of covering portions of said metal foil of a safety valve element for a battery.

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8. A safety valve element for a battery according to claim 6 or 7, wherein said protection film is a coated film of an organic coating.

9. A safety valve element of a battery according to claim 6, wherein said protecting film is a laminated film of an organic resin film.

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10. A closing plate, wherein said safety valve element for a battery according to ~~any of claim 6 to 9~~ is applied on a closing plate for a battery container having a perforated pore which is to be a valve opening of a safety valve so that said perforated pores of said metal substrate of safety valve element for a battery and said perforated pore of said closing plate are connected through, and said metal substrate and said closing plate are adhered together using adhering means so that both adhere around said perforated pore of said closing plate.

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11. A closing plate, wherein said safety valve element for a battery comprising a metal substrate having perforated pores and a metal foil laminated on said metal substrate so as to cover said perforated pores is applied on a closing plate for a battery container having a perforated pore which is to be a valve opening of a safety valve so that said perforated pores of said metal substrate of safety valve element for a battery and said perforated pore of said closing plate are connected through, and said metal substrate and said metal closing plate are adhered together using adhering means so that both adhere around said perforated pore of said closing plate, and after that an organic coating is coated on said safety valve element for a battery.

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12. A closing plate according to claim 10 ~~or 11~~, wherein said adhering means is laser beam welding.

13. A closed battery, wherein an electrode comprising a posi-

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tive electrode, a negative electrode and a separator is packed with electrolyte into a battery container and opening portion of said battery container is closed so that said a closing plate for battery according to ~~any of~~ claim 10 ~~to 12~~ is put into and fixed around inner circumference of said opening portion of said battery container.

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